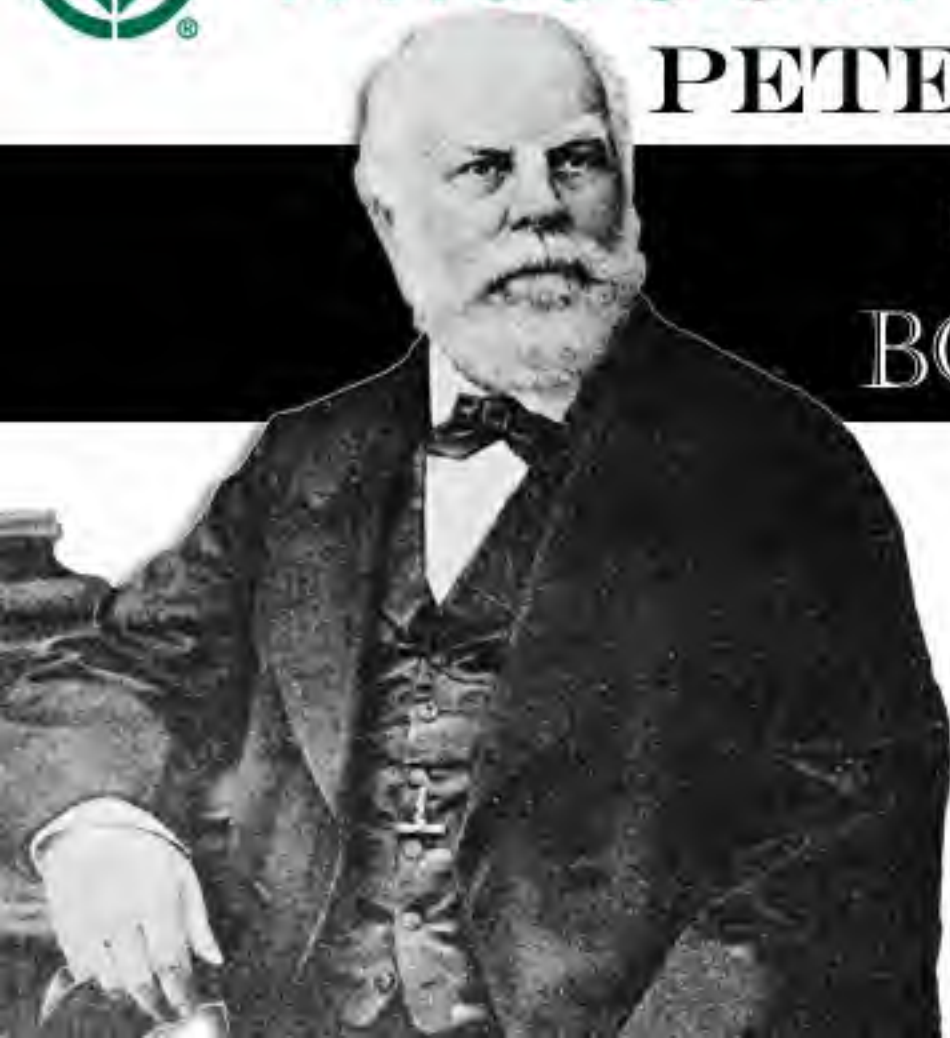


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BOTANICAL NOTEBOOKS

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I. Genuini

1. *glomeruliflora*

Commenced Aug 9th 1865

27-53



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GARDEN



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Merist

P.M.

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ons at
to.

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16 *J. maritimus Lam*

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Y.
1861...	32.2	40.4	44.8	58.1	64.1	76.9	77.5	78.6	69.1	57.9	46.0	39.7	57.1°F.
1862...	28.9	30.2	43.2	55.0	69.7	75.1	81.2	80.7	72.1	57.3	42.6	41.3	56.4°F.

RELATIVE HUMIDITY.

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of 6, 9, 12, 3, 6 and 9, from morning till night, based upon daily observations at these hours through the years 1861 and 1862, at St. Louis, Mo.

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.
1861	8.6	10.0	9.2	7.9	8.7	6.9
1862	8.9	10.0	9.1	7.3	8.1	6.8

TEMPERATURE.

1861	48.9°F.	54.9	61.6	63.6	59.3	54.3
1862	48.9	55.0	60.9	62.3	58.0	53.6

RELATIVE HUMIDITY.

1861	86.4	71.3	60.3	57.2	65.1	77.3
1862	85.3	70.6	60.0	57.5	67.6	78.0

MANN
PAPERS
VICAL
NE

27-33

Eugenia

foliosa

hexandra



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V. Positive or Negative Electricity in the Observations of '61 & '62.

	Positive Electricity.		Negative Electricity.		No Electricity, or 0.		Highest Positive Electricity.	
	1861.	1862.	1861.	1862.	1861.	1862.	1861.	1862.
Jan.....	179	179	3	5		2	40°	40°
Feb.....	162	166	6	2			34	33
March...	168	179	15	8			30	48
April....	157	157	12	22	1	1	33	52
May.....	171	180	17	5	1	3	25	32
June	162	143	5	2	8	20	16	21
July.....	183	153	3	8	1	24	14	11
August..	176	143	5	4	6	40	15	19
Sept.....	169	117	1	1	10	61	18	23
Oct.....	162	143	4	3	20	41	33	35
Nov.....	172	157	2	7	6	16	42	42
Dec.....	175	166	5	0	6	17	37	35
	2046	1883	78	67	59	225	42°	52°



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Juncus maritimus

Aug 13 1865

Galathea lutea



X10



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6168



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Junonia manilius Lam

Aug 13 1865

Cette, Schiappa

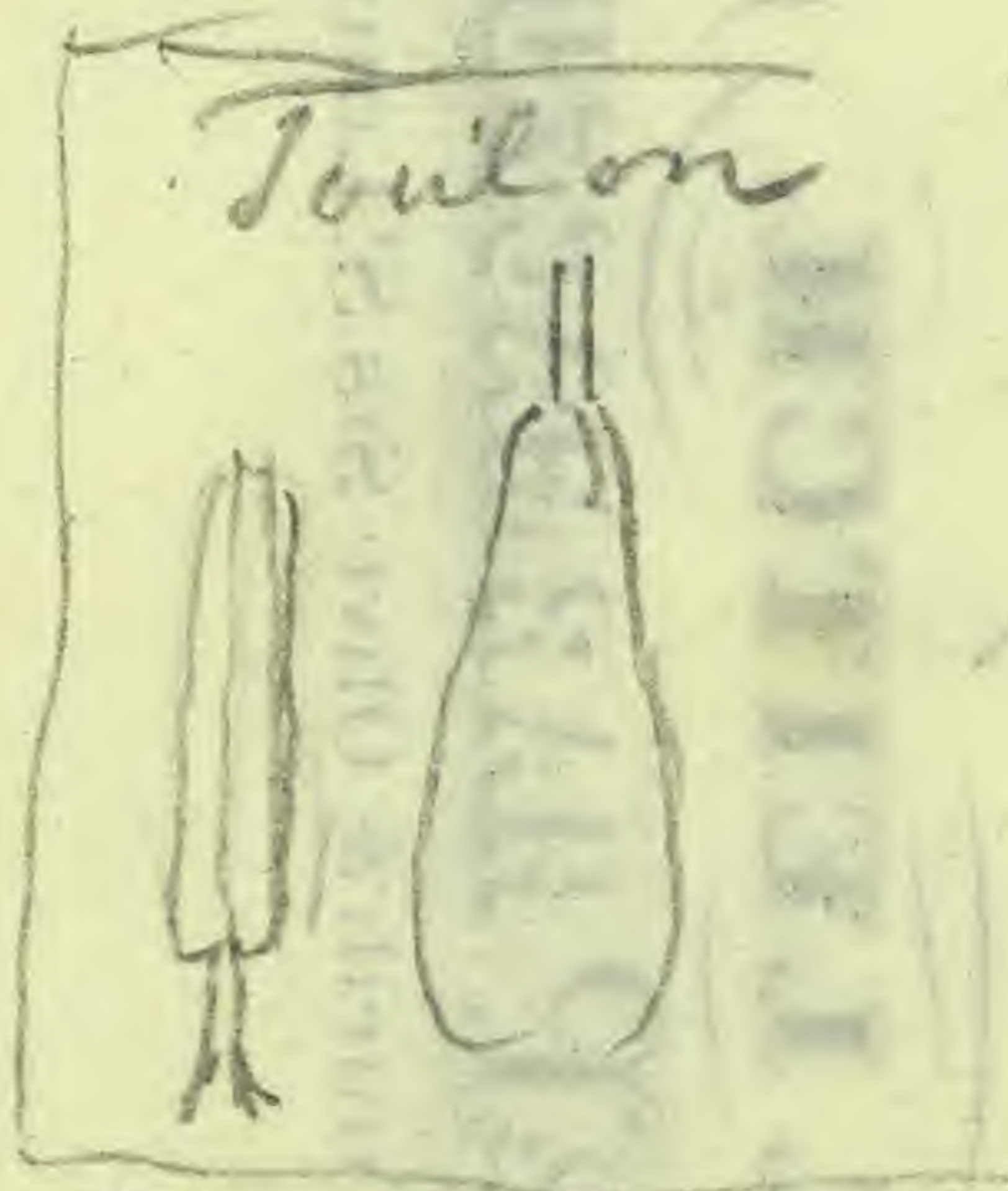
inside of valve

x10

x60



mature



Capsula virescens 3-gona

charitacea

Stamen not deciduous



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"*Juncus maritimus*
mixed with *J. marginatus*
Florida Chapman - Hb Gray

Nov 4 1865

not ripe stronger ribbed
than ripe ones
x60



sepalis externis
Capsula ovata
mucronata apiculata
locumolatis, interioribus
brevioribus obtusis
super mucronatis
latis albo marginatis

antheris desideratis, while in margin
they are very conspicuous, brown

Dark red brown with white
fold of testa, like



usually apiculate at tip

no crossbars

ribs twisted, undulate
no crossbars



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1868



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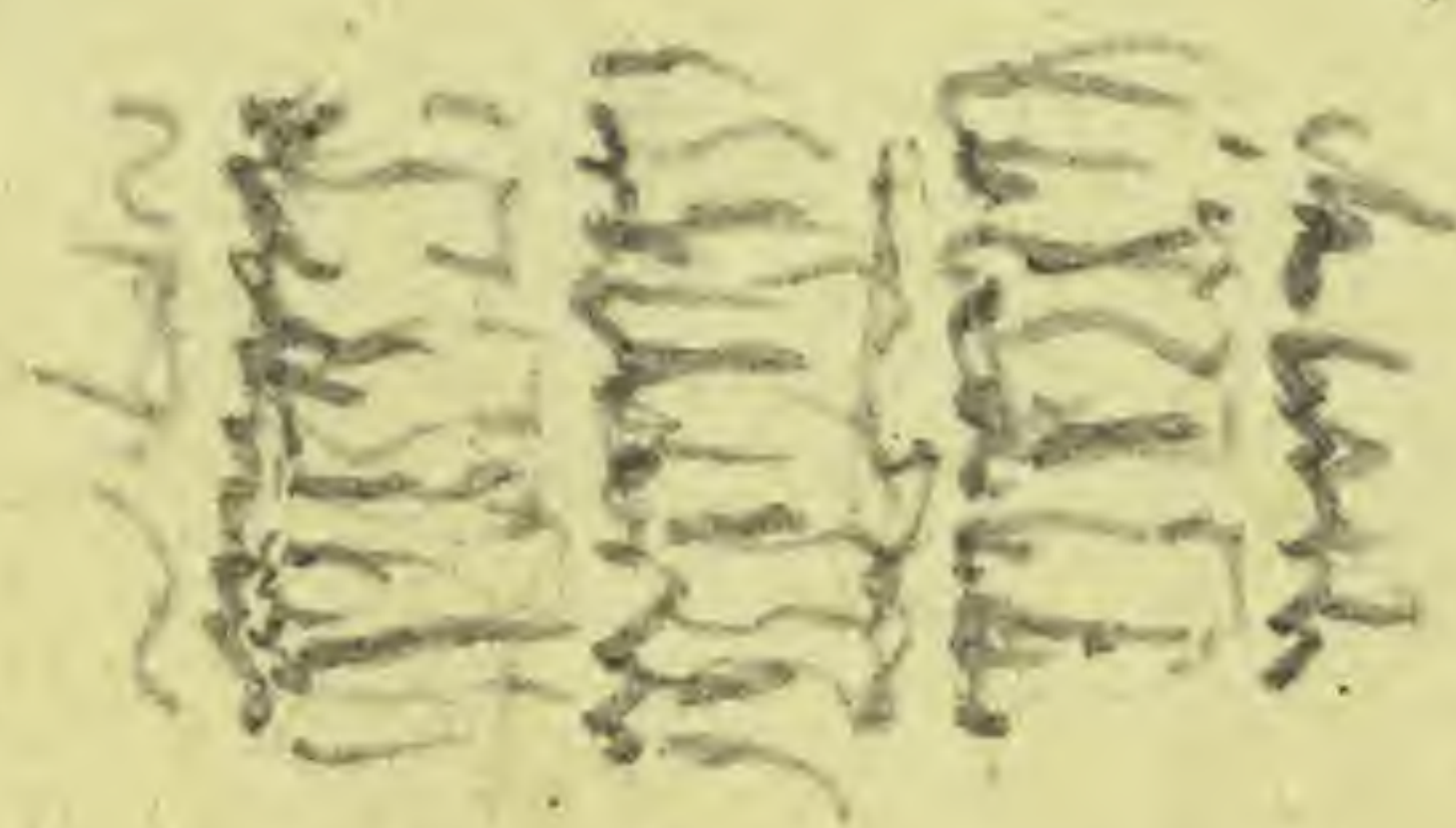
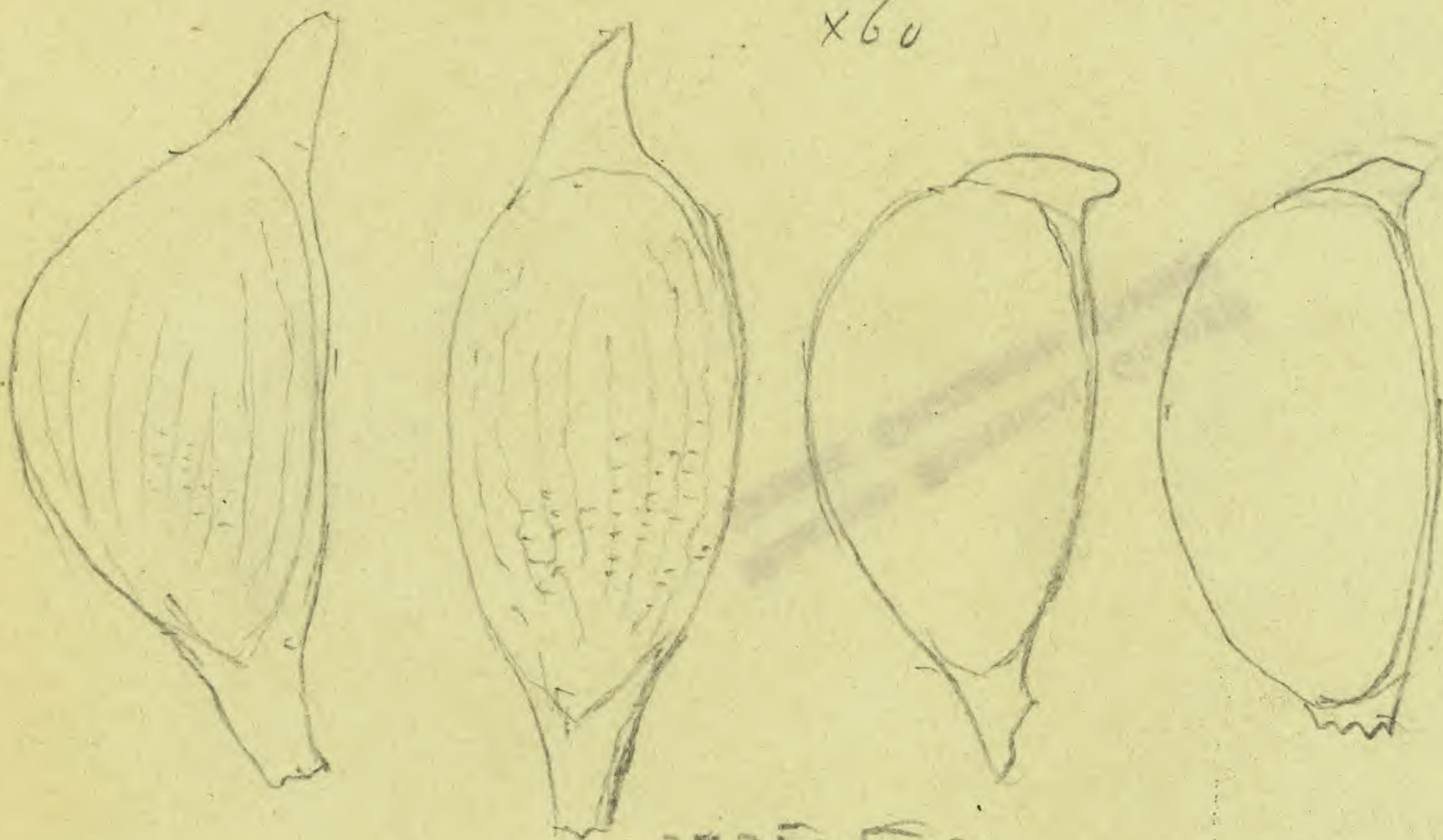
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I. maritimus

Jan 20. 1856

Cette Schimper

x60



x 150



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Juncus maritimus

Jan 26 1866

Europe

Hb Acad Phil



unripe seed



ind. flower
3 angular

ext sepals lanceolate acute 5-nerved ^{indistinctly} nerved
inter a little shorter, obtuse, usually
nervose, 3-nerved

bracts coriaceous nerved, externally 1-nerved



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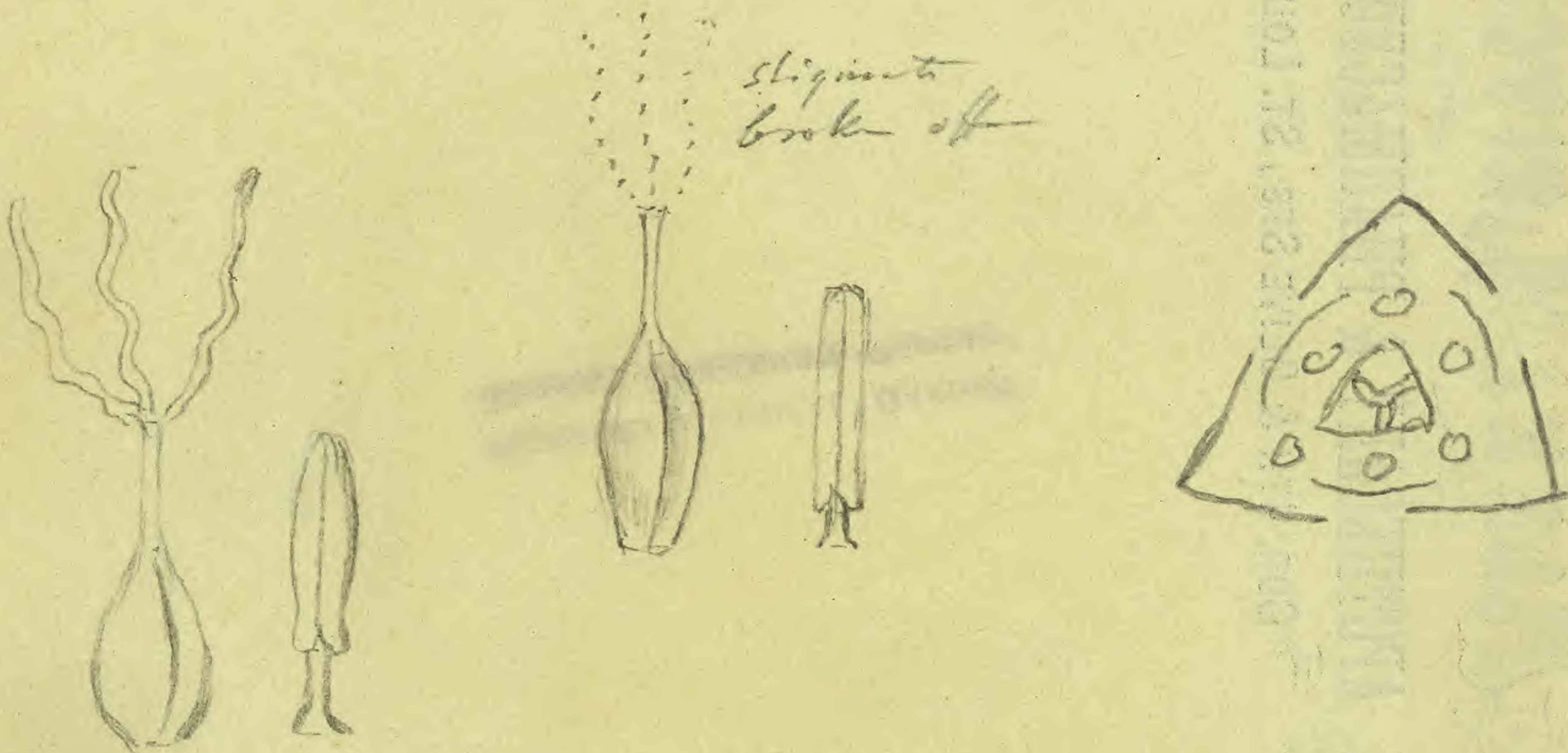


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S. maritima

Jan 29 1866

Europe



England, - Hb Gray



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"*J. maritimus* R Br."

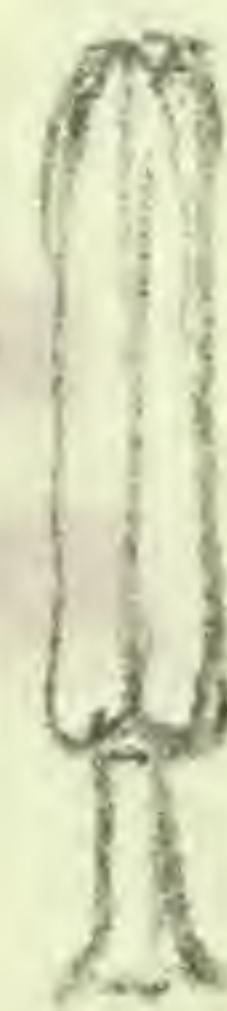
March 12 1866

New Zealand, Horebrom, - Hb Gray
maritimus var *atratus*



quite ripe?
red brown

strongly ribbed
(9-10 ribs visible)
with irregular
indistinct cross bars



Capula ovata, acuta, fusco-atra, lucida
sepala exteriora aequant, s. vix excedunt
sep. interiora breviora obtusa late
marginata



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Juncus maritimus Neapolitanus
in sabulosis humidi; ad lacum Fusaro
et ad Mare Morto densissime
caespitosus.

J. maritimus, Bayonne, Ha. itinerar.
Eudress. Jun 1831 candidum horizontal
robustissimum elongatum procerum. (H. Cesati)



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ing.

Dimensions.—Length, 0.20 of an inch; width, 0.18.
The *Elæacrinus Kirkwoodensis* is nearly allied to *E.*
(*Pentremites*) *melo*, from which it is distinguished by its
much smaller size and less deeply excavated base. It also
occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the
Pacific railroad near Kirkwood, St. Louis county, Missouri.

8

I. acutus

Eugenia

foliosus

hexandra

Brasilis, Chamisso fide Meyer

Linn. 3. 374

43-50



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GARDEN

as ... on Cape Simpson's return trail. Circumstances prevented me from obtaining more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.

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mairti

"Junonia acutus"

Jan 18 1866

Florida, Baldwin, ex Hb. Schweinurt - Hb. Acad

Cap. tub. 5 flon Phil



ab 40-45 ribs visible
very slight

filament
(anther, fallen off)

placenta
maxima

sepal. externum lanceolatum, serrulatum, ac-
uminatum, 1 nervo

sepal. internum brevius, obtusius, breviter
cuspidatum, indistinctum, 1 nervo



x 150



inside of
valve

very ripe seed



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"*Samolus acutus*"

Jan 18 1866

Florida Chapman, Hb. A Gray.

X 30



abortive
stamen,



female flower,



anther abortive, or already
decaying?

inner sepals much shorter than elongated
acuminate - subulate outer ones



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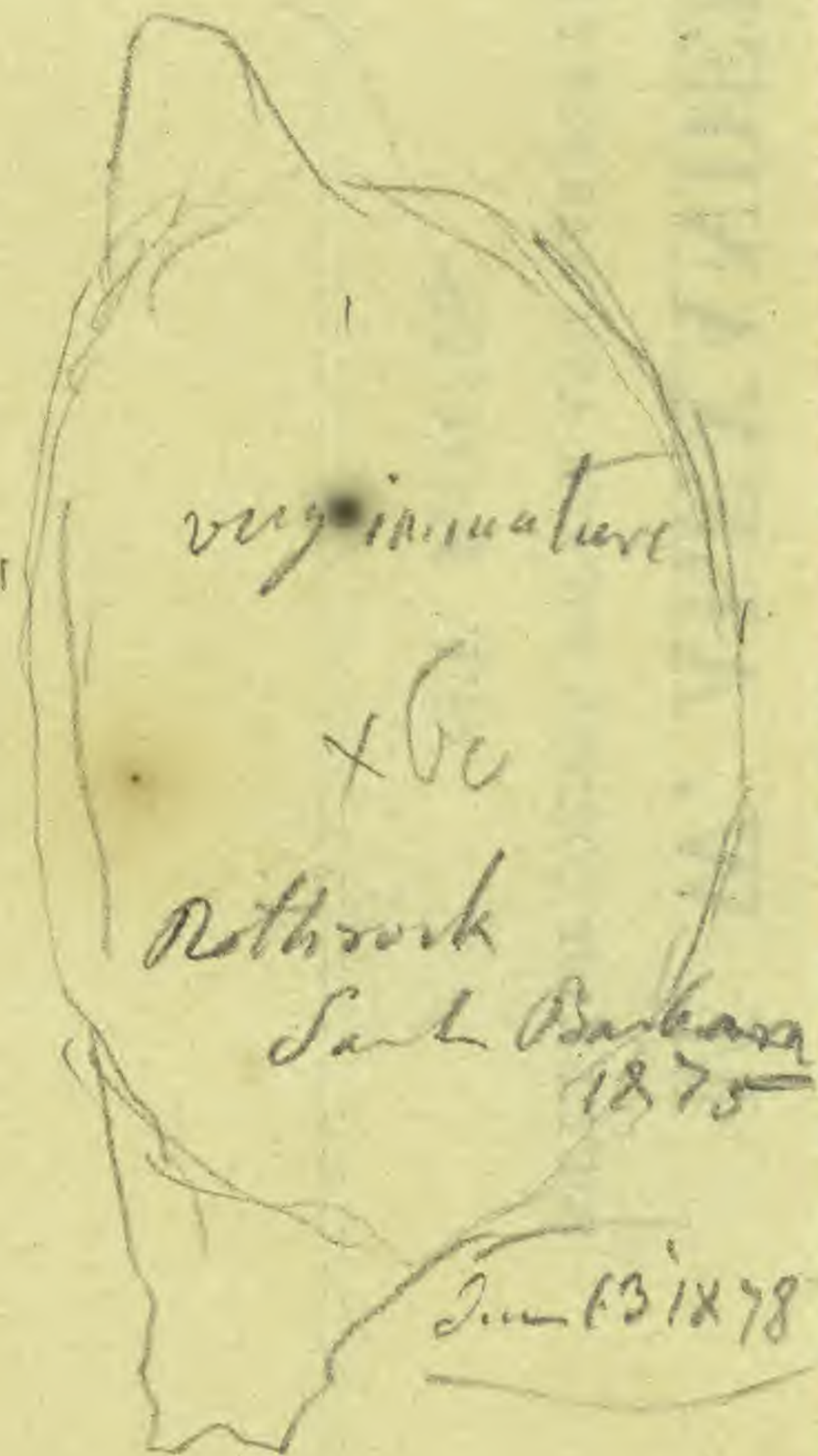
486 California State Survey
Breuer mss 1866

Juncus acutus

Febr 27 1866

San Luis Obispo, April
- dense brush

involucral leaves, acuminate
aristate, nerved, longer than
the 2 or 3 flowers



0 1 2 3 4 5 6 7 8 9 10

cm

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M. W. ALEXANDER,

SOUTH-EAST CORNER FOURTH AND MARKET STREETS

ST. LOUIS.

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2.

J. Roemerianus Scheele
 Linnaea 22. 348

TEMPERATURE.

	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	32.2	40.4	44.8	58.1	64.1	76.9	77.5	78.6	69.1	57.9	46.0	39.7	57.1°F.
1862...	28.9	30.2	43.2	55.0	69.7	75.1	81.2	80.7	72.1	57.3	42.6	41.3	56.4°F.

RELATIVE HUMIDITY.

	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of 6, 9, 12, 3, 6 and 9, from morning till night, based upon daily observations at these hours through the years 1861 and 1862, at St. Louis, Mo.

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.						
1861	8.6	.....	10.0	.....	9.2	.....	7.9	.....	8.7	.....	6.9
1862	8.9	.....	10.0	.....	9.1	.....	7.3	.....	8.1	.....	6.8

TEMPERATURE.

1861	.....	48.9°F.	.....	54.9	.....	61.6	.....	63.6	.....	59.3	.....	54.3
1862	.....	48.9	.....	55.0	.....	60.9	.....	62.3	.....	58.0	.....	53.6

RELATIVE HUMIDITY.

1861	.....	86.4	.....	71.3	.....	60.3	.....	57.2	.....	65.1	.....	77.3
1862	.....	5.3	.....	70.6	.....	60.0	.....	57.5	.....	67.6	.....	78.0

34-42

V. Positive or Negative Electricity in the Observations of '61 & '62.

	Positive Electricity.		Negative Electricity.		No Electricity, or 0.		Highest Positive Electricity.	
	1861.	1862.	1861.	1862.	1861.	1862.	1861.	1862.
Jan.....	179	179	3	5		2	40°	40°
Feb.....	162	166	6	2			34	33
March...	168	179	15	8	1	1	30	48
April....	157	157	12	22	1	3	33	52
May.....	171	180	17	5	8	20	25	32
June	162	143	5	2	1	3	16	21
July.....	183	153	3	8	6	24	14	11
August..	176	143	5	4	1	40	15	19
Sept.....	169	117	1	1	10	61	18	23
Oct.....	162	143	4	3	20	41	33	35
Nov.....	172	157	2	7	6	16	42	42
Dec.....	175	166	5	0	6	17	37	35
	2046	1883	78	67	59	225	42°	52°

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1368



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Junonia Roemeriana

He. Philad.

Gray Caydon

Morris Island S.C.

Charleston

Galveston

Florida

—

Dr. Grosvenor (Grove)

1864

B. D. Greene

Lindheim

Lindheim

Chapman

(Chapman)

Baldwin

(Baldwin)

Plants feminine

Florida

Georgia

Chapman

(Chapman)

Le Conte

Le Conte



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Buchanan, Bremen Jan 10 1867, writes:

The original *J. Roemerianus* from
Galveston [J. Roemer, May 1st 1847]
is very different from *J. Roemerianus* Engelm
from Florida:

Style as long as germen
Flowers larger, more in the
crowded capitulum
Ext sepals peculiarly folded
and rostrate.



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M. KOVÁCS,
APOTHECARY

Franklin Avenue, bet. 18th & 19th Streets,

ST. LOUIS, MO.

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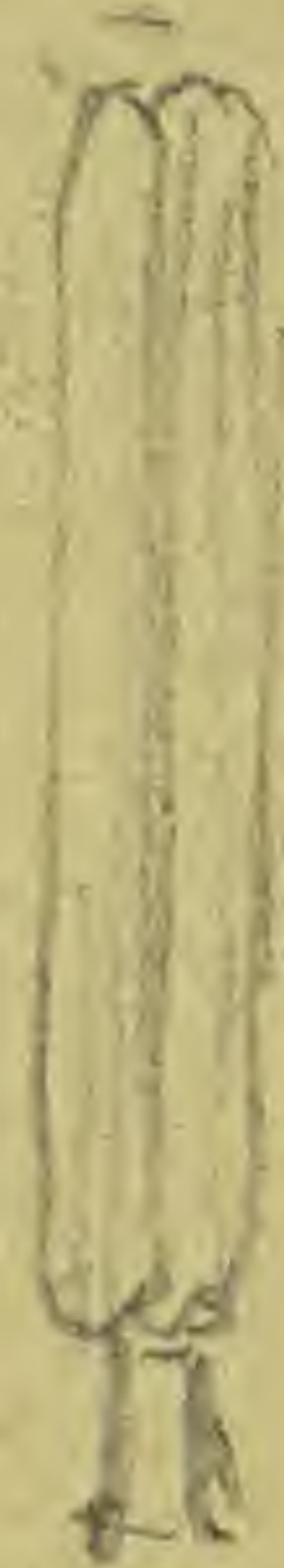
MISSOURI
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Junonia Roemeriana Schult. Jan 31 1867

original specimen of F. Roemer's collection

Galveston May 1 1867

heads 4-6 or even
7 flowered



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Compare *Juncus Rocmerianus* Scheele

(1849)
Linnaea 22. 348 — Welp. Bot. 3. 655

Galveston island. Is it *J. maritimus*?

Calam. erecti aphylli teretes basi vaginati

Vagina laciniatæ aphyllæ?

Involutionis foliola 2 pungentia, inferius aethala longius

Floris glomeratis bracteatis 4-6. flori

Sepala oblonga lanceolata mucronata, exteriora
longiora

Capsula?



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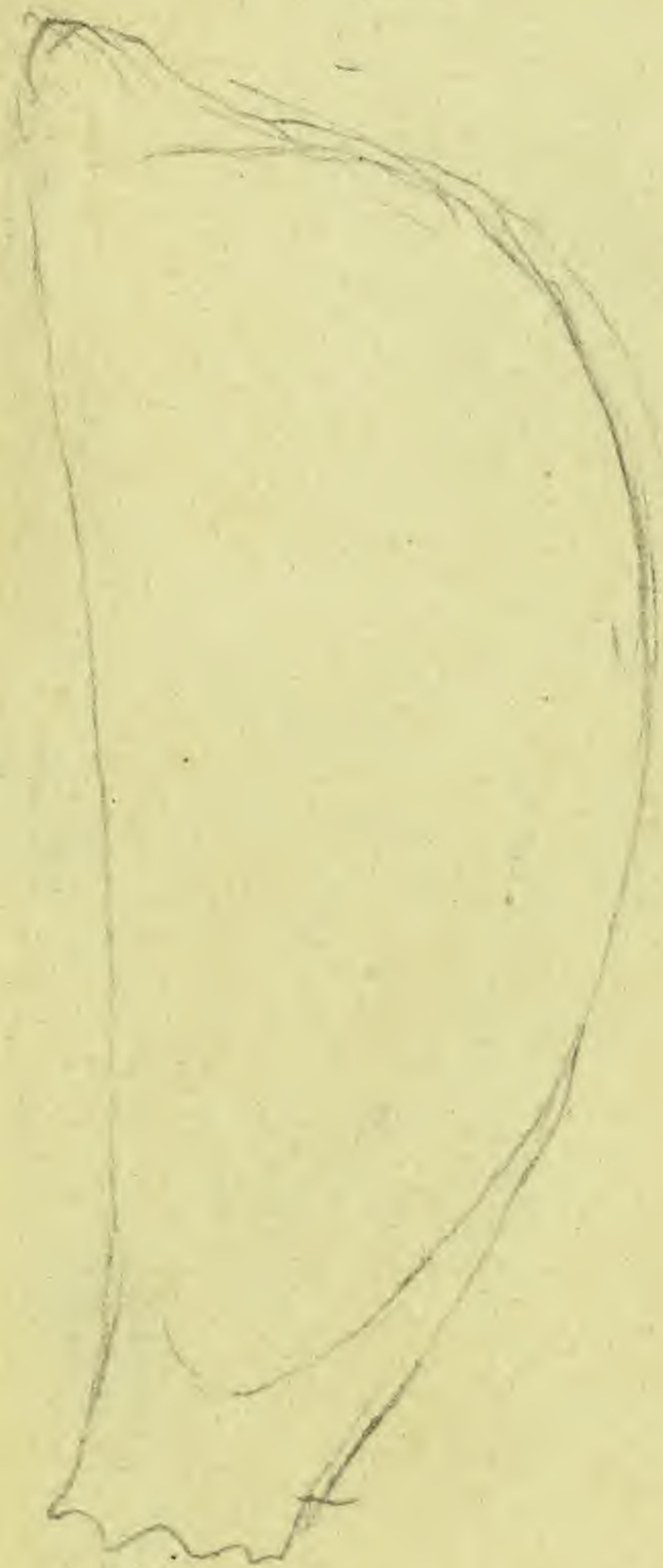
Simons macrocarpus Nees

Jan 20 1866

Ep. b. sp

why not *contus*?

x60



very unripe



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Immunus

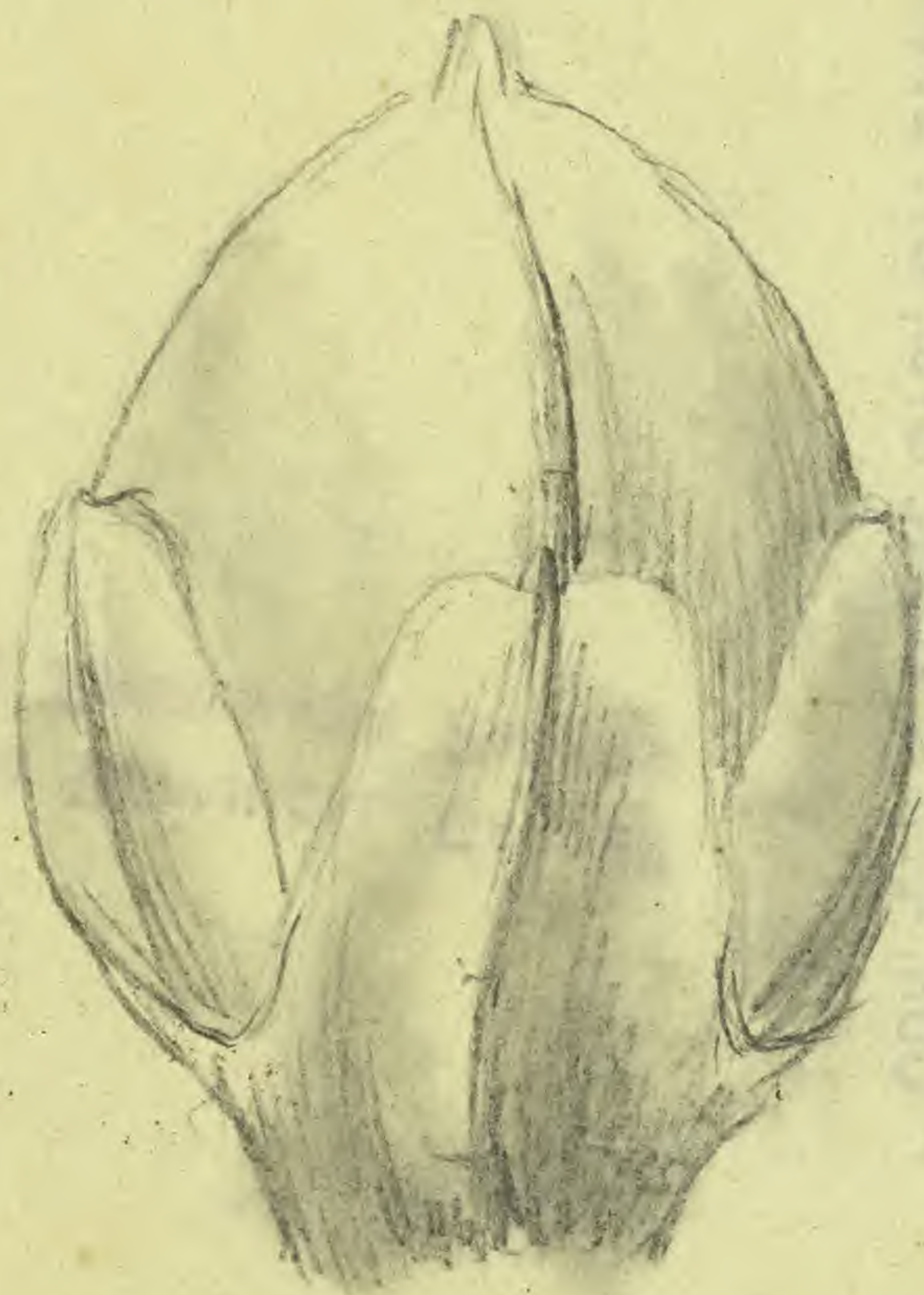
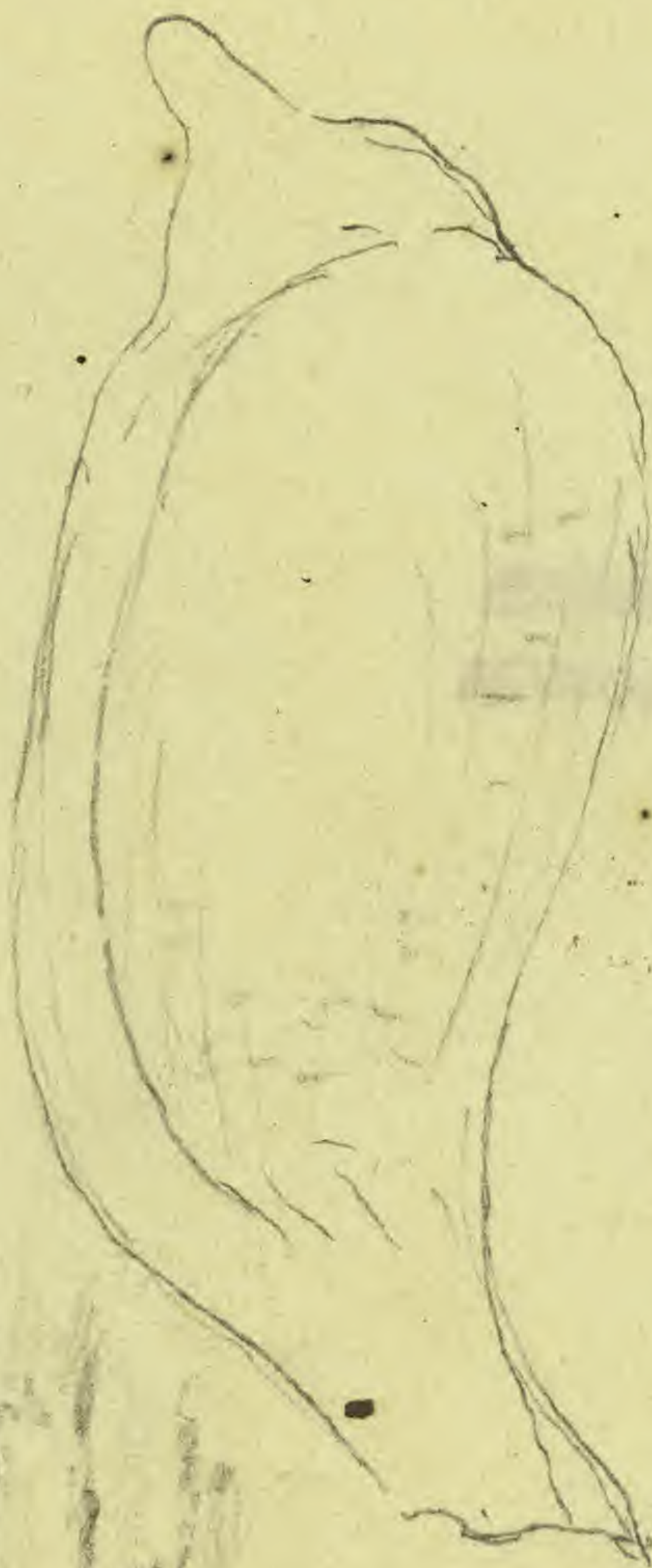
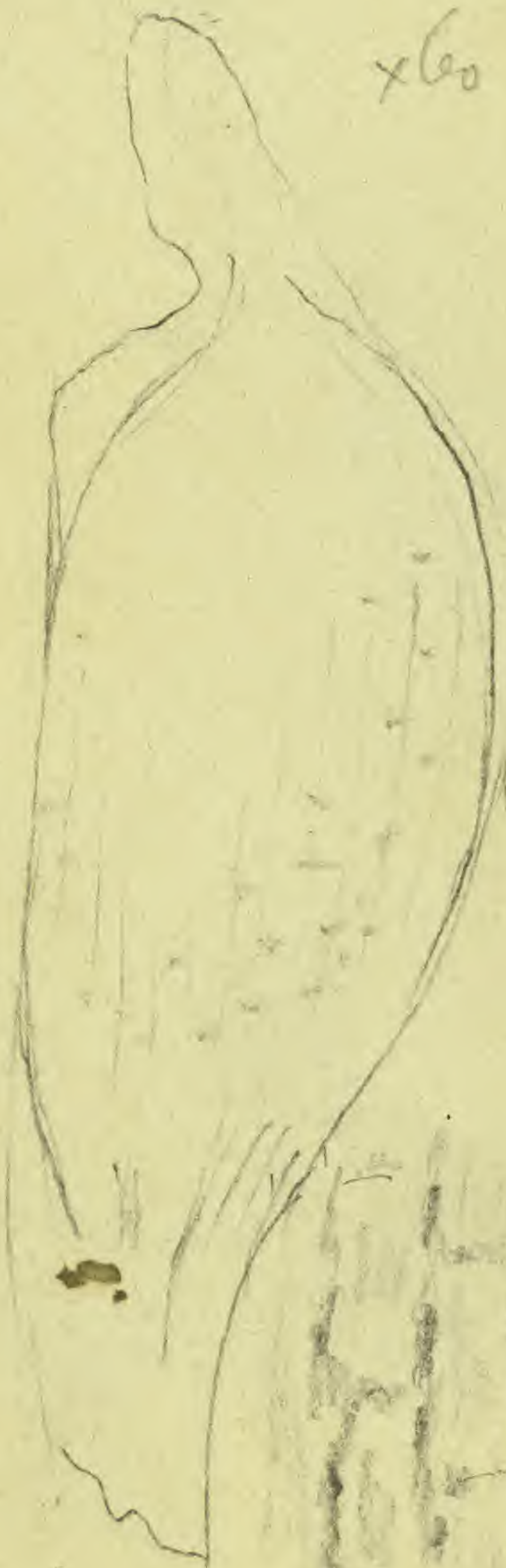
Jan 19 1865

S. America
(La Plata ?)

Baldwin

: Hb Acad Phil

x60



x150

ribs indistinct; semi cross fold, faint indication of reticulation
and fruit length folds



0 1 2 3 4 5 6 7 8 9 10

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